

Page 6, line 16 has been amended to point out that the rectangular insulation member 12 has edges 12a, 12b, 12c and 12d, comprising two pairs of opposite edges 12a, 12c and 12b and 12d. This is inherent in the rectangular shape. This is based on original claims 2, 3 and 7.

Claim 1 has been amended at line 11 to qualify the protective top layer (16) as "relatively hard, dense". Support is found on page 9, lines 2 and 3. Similar language is used in claim 1, clause (c) of applicant's U.S. Patent 4,804,578. The top layer must be relatively hard and dense in order to protect the roof board member 12 and to give the support needed as described on page 9 (especially lines 3-12) of the specification. This amendment also clearly distinguishes the protective layer herein from a pliable (and therefore not hard) sheet 16 as shown in Elder.

Claim 1 has been further amended at line 11 by replacing "overlying" with "which is adhered to the tops of the blocks of". this is supported by page 9, lines 1 and 2 of the specification. This change overcomes the rejection under 35 USC 112 set forth in paragraph 15 of the Office action.

Claim 6 and 7 have been canceled without bias or prejudice.

New claims 8 and 9 depend from claim 1 and characterize the solid insulating material (12) as "lightweight" and "lightweight cellular", respectively. Support is found on page 6, lines 4-13.

Claims 1-5 have been rejected under 35 USC 112, second paragraph, as set forth in item 15 of the Office action. It is believed that the amendment to claim 1, line 11, substituting "which is adhered to the tops of the blocks of" for "overlying" cures this matter. Support is found on page

9, lines 1 and 2 of the specification and in Fig. 1 of the drawing.

Claims 1-7 have been rejected under 35 USC 112, second paragraph as being indefinite for failing to show the peripheral edges of the roof board structure as claimed. This defect has been cured by the proposed amendment to Fig. 2 of the drawings and to page 6, line 16 of the specification.

The objections to the disclosure, noted in item 17, have been corrected.

Claims 1-7 (all claims) have been rejected under 35 USC 103 as being unpatentable over Elder in view of Clarvoe.

The composite insulated roof board structure of this invention comprises an insulated roof board member (12) comprising a main portion of rigid coherent solid insulating material, and a top portion which comprises a plurality of spaced blocks (14) that define a network of interconnected channels (15a and 15b) at the same level for horizontal venting of water vapor and a relatively hard, dense protective top layer (16).

Elder shows a roofing structure comprising an insulation layer 10 with an elastomeric sheet 16, which serves as a water impermeable sheet, thereabove. Sheet 16, being elastomeric, is pliable and is not relatively hard as required by claim 1 as amended. Sheet 16 of Elder is simply a conventional roofing membrane, which is now nearly analogous to membrane 22 shown herein than to the hard, dense top layer 16. Furthermore, Fig. 4 of Elder shows the channels as being at the bottom of the insulation member 10 and not just below the top layer as required in claim 1. Finally, the top layer of Elder is not adhered to the tops of the blocks as required by claim 1 as amended.

Clarvog shows a roofing structure comprising a film 12 adhered to a sponge layer 18 (Fig. 3) which may have intersecting grooves 20 and 22. The film 12 is a plastic material (for example polyisobutylene; column 4, line 9) for weather resistance, and is not relatively hard (and therefore rigid) as required by claim 1 herein.

Neither reference shows a composite roofing structure having a relatively hard, dense protective top layer which is capable of supporting weight and further roofing structures, as disclosed on page 9 herein, and as required in claim 1. Also, neither reference teaches the basic combination required here, i.e., of an insulated roof board member having a main portion, a top portion comprising blocks forming intersecting channels and located above the main portion, and finally, a hard dense protective top layer adhered to the tops of the blocks, all as required in claim 1.

Reconsideration and allowance in the light of the foregoing amendment and remarks are respectfully requested.

Respectfully submitted,
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